भारतीय मानक
Indian Standard

IS 10525 : 2022

सामान्य प्रयोजन पेयजल ट्रॉली की विशिष्टि

(पहला पुनरीक्षण)

Specification for General Purpose Drinking Water Trolley

(First Revision)

ICS 53.040

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भारतीय मानक ब्यूरो
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October 2022 **Price Group 5**

Earth Moving Equipment and Material Handling Sectional Committee, MED 07

FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Earth Moving Equipment and Material Handling Sectional Committee had been approved by the Mechanical Engineering Division Council.

This Indian Standard will supersede IS 10525 : 1983.

Drinking water trolleys has been used in order to provide adequate drinking water in several public places as stations, hospitals and parks etc.

The composition of the Committee responsible for the formulation of this standard is given in Annex B.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 ‘Rules for rounding off numerical values (*second revision*)’. The number of significant places retained in the rounded-off value should be the same as that of the specified value in this standard.

Indian Standard

SPECIFICATION FOR GENERAL PURPOSE DRINKING WATER TROLLEY

(First Revision)

1 SCOPE

1.1 This standard prescribes the requirements for drinking water trolley for general purpose.

2 REFERENCES

The standards listed in Annex A contain provisions, which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated in Annex A.

3 DESIGN

The trolley shall be of 250 l nominal capacity and its dimensions shall be as shown in Fig. 1.

4 CONSTRUCTION

4.1 The trolley shall consist of a barrel, its supports for mounting frame, handle and wheels/castor for movement.

4.2 Barrel

The barrel shall be horizontal and of cylindrical shape with dished or conical ends as agreed to between the purchaser and the supplier. The diameter of the barrel shall be 500 mm. The barrel shall be designed with a positive slope towards its outlet and ensure complete drainage of the water during the course of cleaning.

4.2.1 The barrel shall be made of stainless steel conforming to IS 6911.

4.2.2 Barrel inlet hole with collar ring and cover shall be made of stainless steel conforming to IS 6911or fibre glass or as agreed to between the purchaser and the supplier.

4.2.3 The inlet hole of 250 mm diameter shall have a cover which shall be hinged on to a suitable coller on the barrel. The cover when in closed position shall prevent entry of dust into the tank.

4.2.4 One outlet shall be located at the bottom of the barrel for cleaning purposes. It shall be provided with a dummy plug.

4.3 Barrel Support

This shall suit the trolley frame and the barrel to provide a positive anchoring of the complete tank on the frame.

4.4 Frame

The frame shall be made of mild steel pipe (light quality) conforming to IS 1239 (Part I). The pipe fittings shall conform to IS 1239 (Part II) and shall suit the standard push cocks and other pipe connections.

4.5 Wheel

The wheels including one front castor of size 250 × 60 mm conforming to IS 7369 shall be used. The front castor shall be provided with a suitable arrangement nearest to the trolley-man to facilitate movement to the trolley in the desired direction.

4.6 Tumbler Rack

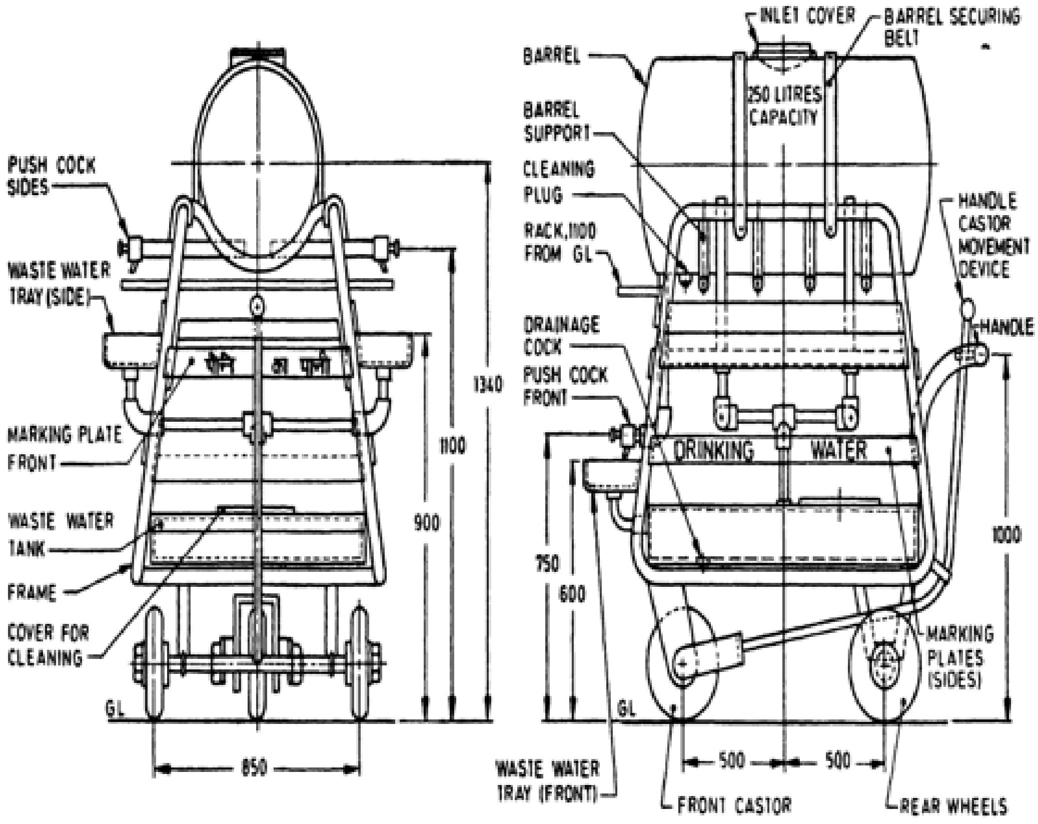
The tumbler rack shall be made of steel sheet conforming to IS 1079 or as agreed to between the purchaser and the supplier.

4.7 Waste Water Tray

The waste water tray shall be made of steel sheet conforming to IS1079 or as agreed to between the purchaser and the supplier.

4.8 Waste Water Tank

To prevent the spreading of drain water, each trolley shall be provided with a waste water tank of capacity not less than 50 percent of barrel capacity and shall be made of steel sheet conforming to IS 1079.



All dimensions in millimetres.

FIG. 1 WATER TROLLEY (FOR GENERAL PURPOSE CAPACITY 250 LITRES)

4.8.1 The tank shall be connected to all the waste water trays.

4.8.2 The tank shall be provided with an outlet plug type cock to drain out the waste water.

4.8.3 A hinged cover shall be provided on the tank to enable its cleaning easily.

5 RUST PREVENTION

The parts liable to rusting shall be painted with an anti-rust primer using non-corrosive filler.

6 WORKMANSHIP

6.1 The trolley shall be free from warp in structural framework.

6.2 The welds shall be ground smooth.

6.3 Wherever, an opening in steel sheets is made, suitable stiffening arrangement shall be welded near edges of the opening.

6.4 The painted surfaces shall be free from wrinkles, irregular painting drippings, scratches and uneven colouring.

7 TEST

7.1 The barrel after grinding the welds and surface finishing shall be tested for water leakage by subjecting it to a hydraulic pressure of 3.5 N/cm^2 for 5 minutes.

8 MARKING

8.1 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act*, 2016 and the Rules and Regulations framed thereunder, and the products may be marked with the Standard Mark.

INTERNATIONAL SYSTEM OF UNITS (SI UNITS)

Base Units

Sl No.	**Quantity**	**Unit**	**Symbol**
(1)	(2)	(3)	(4)
i)	Length	Metre	m
ii)	Mass	kilogram	kg
iii)	Time	second	s
iv)	Electric current	ampere	A
v)	Thermodynamic	Kelvin	K

Temperature

Sl No.	**Luminous intensity**	**candela**	**cd**
(1)	(2)	(3)	(4)
i)	Amount of substance	mole	mol

Supplementary Units

Sl No.	**Quantity**	**Unit**	**Symbol**
(1)	(2)	(3)	(4)
i)	Plane angle	radian	rad
ii)	Solid angle	steradian	sr

Derived Units

Sl No.	**Quantity**	**Unit**	**Symbol**	**Definition**
(1)	(2)	(3)	(4)	(5)
i)	Force	newton	N	1 N = 1 kg.m/s
ii)	Energy	Joule	J	1 J = 1 N m
iii)	Power watt	watt	W	1 W = 1 J/s
iv)	Flux	weber	Wb	1 Wb = 1 V.s
v)	Flux density	Tesla	T	1 I = 1 Wb/m^2
vi)	Frequency	hertz	Hz	1 Hz = 1 c/s (s^{-1})
vii)	Electric conductance	Siemens	S	1 s = 1 A/V
viii)	Electro motive force	volt	V	1 V = W/A
ix)	Pressure stress	pascal	Pa	1 Pa = 1 N/m^2

ANNEX A

(*Clause* 2)

LIST OF REFERRED INDIAN STANDARDS

IS No.	*Title*
6911 : 2017	Stainless steel plate, sheet and strip — Specification (*second revision*)
1239 (Part 1) : 2004	Steel tubes, tubulars and other wrought steel fittings — Specification: Part 1 Steel tubes (*sixth revision*)
1239 (Part 2) : 2011	Steel tubes, tubulars and other steel fittings — Specification: Part 2 Steel pipe fittings (*fifth revision*)
7369 : 1983	Specification for wheels and castors (*first revision*)
1079 : 2017	Hot rolled carbon steel sheet, plate and strip — Specification (*seventh revision*)

ANNEX B

(*Foreword*)

COMMITTEE COMPOSITION

Earth Moving Equipment and Material Handling Sectional Committee MED 07

Organization(s)	*Representative(s)*
BEML Ltd, Bengaluru	SHRI V. SEKAR (***Chairman***)
Airports Authority of India, New Delhi	SHRI K. S. KUNWAR SHRI JASPAL SINGH (*Alternate*)
Automotive Research Association of India, Pune	SHRI A. AKBAR BADUSHA
BEML Ltd, Bengaluru	SHRI HEMANT KUMAR (*Alternate*)
Bharat Coking Coal Ltd, Dhanbad	SHRI ARUN NAND SAHAY SHRI CHANDRA SHEKHAR S. I. (*Alternate*)
Bharat Heavy Electrical Ltd, New Delhi	SHRI G. BHAGCHANDANI SHRI S. K. BHAUMIK (*Alternate*)
Caterpillar India Pvt Ltd, Chennai	SHRI K. REJI JOSE SHRI V. BHASKARAN (*Alternate*)
Cement Corporation of India Ltd, New Delhi	SHRI A. K. SRIVASTAVA SHRI ANURAG KUMAR SAINI (*Alternate*)
Central Mine Planning and Design Institute Ltd, Ranchi	SHRI PARAG MAJUMDAR SHRI PRAVEEN K. SINHA (*Alternate*)
Directorate General Factory Advice Service and Labour Institutes, Mumbai	SHRI SUMIT ROY
Directorate General of Mines Safety, Dhanbad	SHRI D. B. NAYAK SHRI VIJAY YADAORAO BARAPATRE (*Alternate*)
Directorate General of Quality Assurance, Ministry of Defense, New Delhi	SHRI LT COL SIDHARTH KHATTRI SHRI RAGHUBIR SINGH (*Alternate*)
Engineers India Ltd, New Delhi	SHRI K. C. PAIKAR SHRI R. R. SHRIVASTAVA (*Alternate*)

Organization(s)	*Representative(s)*
Epiroc Mining India Ltd, Nashik	SHRI PRAKASH GORE
Escorts Construction Equipment Ltd, Faridabad	SHRI FAIZ AHMAD MS RUPALI SHARMA (*YP*)
Fact Engineering and Design Organization, New Delhi	SHRI R. K. PALLAI SHRI JUBY CHANDY (*Alternate*)
Heavy Engineering Corporation Ltd, Ranchi	SHRI ARAVIND DOSS SHRI AMIT PAL (*Alternate* I) SHRI VIJAY KUMAR (*Alternate* II)
Indian Construction Equipment Manufacturers Association, New Delhi	SHRI K. V. KRISHNAMURTHY
Indian Institute of Technology (ISM), Dhanbad	SHRI L. A. KUMARASWAMIDHAS
JCB India Ltd, New Delhi	SHRI SAURABH DALELA SHRI VIVEK RAWAT (*Alternate*)
John Deere India Pvt Ltd, Mumbai	SHRI KARTHIK KALIAPPAN SHRI RAJ ANAND (*Alternate*)
Komatsu India Pvt Ltd, Bengaluru	SHRI M. RAJENDRAN SHRI VIKRANT SHARMA (*Alternate*)
L & T Komatsu Ltd, Bengaluru	SHRI G. S. NARAYANA SHRI K. KESHAVA (*Alternate*)
Mahindra Construction Equipment, Chakan	SHRI GOPALKRISHNA RAJENDRA
Manitou India Ltd, Greater Noida	SHRI ATUL K. SINGHAL
Mcnally Bharat Engineering Company Ltd, Kolkata	SHRI ASHOK KUMAR BOSE SHRI SANDIPAN DAW (*Alternate*)
Ministry of Heavy Industries and Public Enterprises, Department of Heavy Industry, New Delhi	SHRI SUSHIL LAKRA
Ministry of Shipping, New Delhi	SHRI ANIL PRUTHI SHRI RAMJI SINGH

Organization(s)	*Representative(s)*
Mumbai Port Trust, Mumbai	Shri Dilip Vishwanathan Shri Pandian Sekar (*Alternate*)
National Council for Cement and building Materials, Faridabad	Shri Kapil Kukreja Shri Saurabh Bhatnagar (*Alternate*)
National Mineral Development Corporation, Hyderabad	Shri S. J. Rao Shri S. K. Roy (*Alternate*)
NTPC Ltd, New Delhi	Shri Madhukar Anand Shri P. S. Chatterjee (*Alternate*)
Office of Development Commissioner (MSME), New Delhi	Shri Susanta Kumar Som Shri Suvankar Santra (*Alternate*)
Project and Development India Ltd, Noida	Shri Narendra Singh Shri Abhijit Mahata (*Alternate*)
Volvo Construction Equipments India Pvt Ltd, Bengaluru	Shri Sai Prasad Polipalli Shri K. Raghuraman (*Alternate*)
In Personal Capacity	Shri G. Nagaraj Venkatesh
BIS Directorate General	Shri Rajneesh Khosla Scientist 'E' and Head (MED) [Representing Director General (Ex-officio)]

Member Secretary

Ms Khashboo Kumari

Scientist 'D' (MED), BIS

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Amend No.	Date of Issue	Text Affected

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